

REMARKS

In view of the above amendments and the following remarks, Applicants request favorable reconsideration and allowance of the above-identified application.

Claims 27-44 remain pending in this application, with Claims 27 and 37 being independent. By this Amendment, Applicants have amended both of the independent claims.

Claims 27-30, 32, 34-39, 41, 43, and 44 stand rejected under 35 U.S.C. § 102 as being anticipated by Japanese Application No. 10-10447 (Asami, et al.). Claims 31 and 40 stand rejected under 35 U.S.C. § 103 as being unpatentable over Asami, et al. in view of U.S. Patent No. 5,408,493 (Aoki, et al.). Claims 33 and 42 stand rejected under 35 U.S.C. § 103 as being unpatentable over Asami, et al. in view of U.S. Patent No. 5,999,345 (Nakajima, et al.). Applicants traverse these rejections.

As recited in independent Claim 27, Applicants' invention is directed to a multi-beam scanning apparatus having a laser light source and a driving circuit board. The laser light source includes a laser chip having a plurality of emission points for emitting laser beams and a terminal for energizing the laser chip. The terminal of the laser light source is fixed to the driving circuit board such that a straight line passing the plurality of emission points of the laser light source is inclined with respect to a longitudinal edge of the driving circuit board.

With such a configuration, a distance between the laser beams may be adjusted by inclining the plurality of emission points, without the unnecessary enlargement

of the size of the apparatus (in particular, because the driving circuit board can still be positioned within the wall width of a housing, even with the inclination).

Independent Claim 37 is directed to a multi-beam light source unit which includes features similar to those discussed above with respect to independent Claim 27.

The Asami, et al. document is directed to a laser chip which is rotated to adjust the distance between laser beams. The Office Action cites Figure 6 as showing the features of the present invention. As described in that document, however, a lead extended from the laser chip is not fixed to a driving circuit board, but instead to a different member. Accordingly, the Asami, et al. document does not describe that a straight line passing a plurality of emission points is inclined with respect to a longitudinal edge of a driving circuit board to which the terminal of the laser light source is fixed. In addition, Applicants submit that Figure 6 merely shows a cross section of a light source unit (apparently a plan view looking downward from the screw position). Applicants do not believe that figure shows the above-discussed features of the present invention.

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The Aoki, et al. patent is merely cited in the Office Action as describing the use of an angle-adjusting holder for a laser. Also, the Nakajima, et al. patent is merely cited in the Office Action as describing the use of one- or two-dimensional array lasers in an optical scanning device. Applicants submit that these documents fail to remedy the deficiencies discussed above with respect to the Asami, et al. document.

Accordingly, Applicants submit that the Asami, et al. document and the Aoki, et al. and Nakajima, et al. patents, taken alone or in combination, fail to disclose or suggest at least the features of a terminal of a laser light source being fixed to a driving


circuit board such that a straight line passing a plurality of emission points of the laser light source is inclined with respect to a longitudinal edge of the driving circuit board, as recited in independent Claims 27 and 37.

For the foregoing reasons, Applicants submit that independent claims are distinguishable over the applied documents, whether those documents are taken alone or in combination, and request withdrawal of the rejections under §§ 102 and 103.

The remaining claims in the present application are dependent claims which depend from the independent claims discussed above, and thus are patentable over the documents of record for reasons noted above with respect to those independent claims. In addition, each recites features of the invention still further distinguishing it from the applied documents. Applicants request favorable and independent consideration thereof.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,


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